



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,933	06/21/2001	Haruki Koyanagi	027260-473	3897

7590

04/24/2003

Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

NGUYEN, JOSEPH H

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 04/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,933

Applicant(s)

KOYANAGI, HARUKI

Examiner

Joseph Nguyen

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al (JP 9-178974).

Regarding claim 1, Matsumoto et al discloses on figure 1 a laser diode module comprising a laser diode 20; a lens 30 provided on an optical path of a laser beam emitted by said laser diode; a polarizer 11 provided on an optical path of the laser beam transmitted by said lens; and an optical fiber 40 provided at a location to which the laser beam transmitted by said polarizer is optimally coupled wherein said polarizer 11 is angled so that a direction of polarization permitted to pass through said polarizer is rotated about an optical path of the laser beam passing through the polarizer relative to a direction of polarization of the laser beam transmitted by said lens 30.

Regarding claim 2, Matsumoto et al discloses on figure 1 said optical fiber 40 is provided in the vicinity of the location to which the laser beam transmitted by said polarizer 11 is optimally coupled.

Regarding claim 3, Matsumoto et al discloses on figure 1 said polarizer 11 is placed so that the direction of polarization permitted to pass through said polarizer is

angled against a direction of polarization of the laser beam from said laser diode 20 at an angle ensures a desired level of optical output from said optical fiber 40.

Regarding claim 4, Matsumoto et al discloses on figure 1 a laser diode module comprising a laser diode 20; a lens 30 provided on an optical path of a laser beam emitted by said laser diode; an optical isolator 10 provided on an optical path of the laser beam transmitted by said lens and including a polarizer 11, a rotator 12 and an analyzer 13; and an optical fiber 40 provided at a location to which the laser beam transmitted by said polarizer is optimally coupled wherein said polarizer 11 is angled so that a direction of polarization permitted to pass through said polarizer is rotated about an optical path of the laser beam passing through the polarizer relative to a direction of polarization of the laser beam transmitted by said lens 30.

Regarding claim 5, Matsumoto et al discloses on figure 1 said optical fiber 40 is provided in the vicinity of the location to which the laser beam transmitted by said polarizer 11 is optimally coupled.

Regarding claim 6, Matsumoto et al discloses on figure 1 said polarizer 11 is placed so that the direction of polarization permitted to pass through said polarizer is angled against a direction of polarization of the laser beam from said laser diode 20 at an angle ensures a desired level of optical output from said optical fiber 40.

Regarding claim 8, Matsumoto et al discloses on figure 1 a laser diode module comprising a laser diode 20; a lens 30 provided on an optical path of a laser beam emitted by said laser diode; a polarizer 11 disposed adjacent to the lens which receives the laser beam transmitted by said lens; and an optical fiber 40 provided at a location to

which the laser beam transmitted by said polarizer is optimally coupled wherein said polarizer 11 is oriented such that a direction of polarization permitted to pass through said polarizer is rotated about an optical path of the laser beam passing through the polarizer relative to a direction of polarization of the laser beam transmitted by said lens 30.

Regarding claims 9-11, Matsumoto et al discloses on figure 1 all the structures set forth in the claimed invention 9-11.

Response to Arguments

Applicant's arguments filed on 2/25/2003 have been fully considered but they are not persuasive.

Applicant argues that Matsumoto et al does not disclose, "a polarizer angled such that a direction of polarization permitted to pass through the polarizer is rotated about an optical path of a laser beam passing through the polarizer relative to a direction of polarization of the laser beam transmitted by a lens" as now recited in amended claims 1, 4 and new claim 8. However, Matsumoto et al clearly discloses on figure 1a polarizer 11 angled such that a direction of polarization permitted to pass through the polarizer is rotated about an optical path of a laser beam passing through the polarizer relative to a direction of polarization of the laser beam transmitted by a lens 30. It should be noted that Matsumoto et al teaches that the tapered light is passed through an optical isolator 10 and converged just on the end face of the optical fiber 40 (see English Abstract). That is, said polarizer 11 is angled such that a direction of

polarization permitted to pass through said polarizer is rotated about an optical path of a laser beam passing through the polarizer relative to a direction of polarization of the laser beam transmitted by said lens 30 in the same manner as the structure disclosed in figure 1A of the present application. Therefore, Matsumoto reference still reads on the claimed invention herein.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Nguyen whose telephone number is (703) 308-1269. The examiner can normally be reached on Monday-Friday, 7:30 am- 4:30 pm

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 308-7382 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JN
April 21, 2003



EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800